

Redzic Does Not Disclose All Structures Recited in Claims 1 and 11

The Office Action asserts that Redzic discloses, *inter alia*, a stator provided with a plurality of stator coils which is configured to apply a first rotational force on the first rotor and a second rotational force on the second rotor to cause the first rotor and the second rotor to rotate independently from each other, when a composite polyphase alternating current is supplied to the stator coils. However, the Office Action does not identify where within Redzic the various features are disclosed.

Applicant has carefully reviewed Redzic and has not found disclosure or suggestion in Redzic related to two structural elements recited in claims 1 and 11. First, Redzic does not teach or suggest use of a composite poly-phase alternating current to cause the first rotor and the second rotor to rotate independently as recited in claims 1 and 11. Specifically, Redzic teaches use of a conventional 3-phase AC current, a monophasic AC current or a DC current. *See, e.g.*, col. 2, ll. 44-46; col. 5, ll. 1-2; col. 5, ll. 16-17. The use of a composite poly-phase alternating current recited in claims 1 and 11 permits rotating the first rotor and the second rotor independently of each other.

In contrast to claims 1 and 11, Redzic teaches that an objective of its disclosure is a two-rotor motor where the two rotors “influence each other.” Col. 1, l. 25. Further, Redzic specifically teaches that the two rotors operate co-dependently:

The rotors will work an equilibrium state. In sum, the relative load on one rotating member affects the flux therethrough, and, in turn affects the flux on the other rotor—the rotors affect each other and one rotor is in constant reaction to changes incurred by or on the other rotor.

Col. 6, ll. 7-12.

Thus, Redzic teaches structure that specifically prevents the first and second rotors from rotating independently of each other. Nothing in Redzic suggests changing the disclosed structure in a manner that would resemble that recited in claims 1 and 11.

Second, according to Redzic, a rotor may comprise a permanent magnet or electro-magnet as claimed in claims 3-6, but Redzic does not disclose or suggest anything about the combination of a plurality of poles by a magnet and a plurality of rotor coils on the same rotor (the second rotor) as recited in claims 1 and 11.

Combining a plurality of poles formed by a magnet and a plurality of coils on the same rotor permits changing the number of magnetic poles in that rotor. Having different numbers of poles on the two rotors permits the two rotors to be driven independent of each other with a composite poly-phase AC current applied to the stator.

In contrast to the structure recited in claims 1 and 11, Redzic teaches that the first rotor and the second rotor should be "a conventional short circuit rotor of an asynchronous electro-motor" or "a permanent magnet." Col. 4, ll. 13-18, 38-44. Redzic is silent about the number of poles on the two rotors, but its teachings that the rotors will operate interdependently discussed above would be understood by one skilled in the art as teaching that the number of poles on the two rotors must be the same. Thus, Redzic teaches away from the structure recited in claims 1 and 11.

Since Redzic does not disclose or suggest two elements of structure recited in claim 1, Applicant respectfully maintains that claim 1 is not anticipated by Redzic. Accordingly, Applicant respectfully requests withdrawal of the rejection of claim 1 under 35 U.S.C. § 102(b).

Similarly, since Redzic does not disclose or suggest two elements of structure recited in claim 11 and this deficiency is not resolved by the Hawsey reference, Applicant respectfully maintains that claim 11 is patentable over these two references. Accordingly, Applicant respectfully requests withdrawal of the rejection of claim 11 under 35 U.S.C. § 103(a).

Claims 2 – 10 Are Allowable for Depending Upon Allowable Claim 1

Since claims 2 – 10 depend directly or indirectly from claim 1, which is allowable, Applicant asserts that these claims are also allowable. Accordingly, Applicant respectfully requests withdrawal of the rejections of claims 2 – 10 under 35 U.S.C. § 103(a). This remark also addresses the rejections of claims 5-10 under 35 U.S.C. § 103(a).

Conclusion

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application in view of the above remarks is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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